## (19) World Intellectual Property **Organization**

International Bureau



## 

(43) International Publication Date 7 April 2005 (07.04.2005)

**PCT** 

## (10) International Publication Number WO 2005/031999 A1

(51) International Patent Classification<sup>7</sup>: H01P 1/22, 5/12, H03H 7/18

H04B 3/04,

(21) International Application Number:

PCT/US2004/031028

(22) International Filing Date:

21 September 2004 (21.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/504,684

22 September 2003 (22.09.2003) US

(71) Applicant (for all designated States except US): SOMA NETWORKS, INC. [US/US]; Wharfside Building, China Basin Landing, Suite 2000, 185 Berry Street, San Francisco, CA 94107 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BLODGETT, James, R. [US/US]; 73 Castle Rock Road, Walnut Creek, CA 94598 (US).

(74) Agents: BAUER, Richard, P. et al.; Katten Muchin Zavis Rosenman, East Lobby, Suite 700, 1025 Thomas Jefferson Street, NW, Washington, DC 20007-5201 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

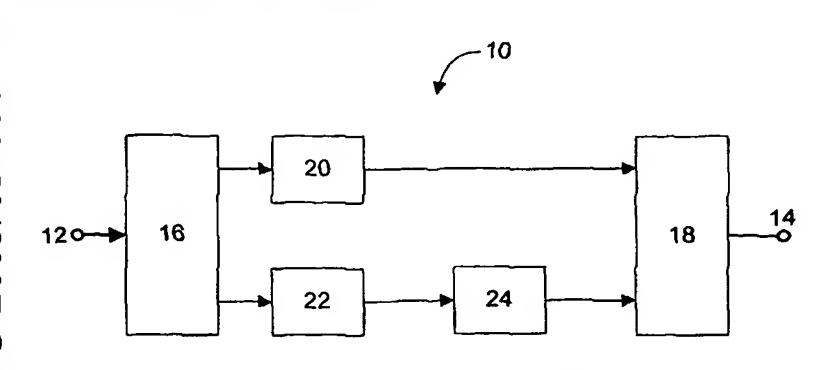
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR ELECTRICALLY ADJUSTING DELAY IN RADIO-FREQUENCY SYSTEMS



adjustable time depending upon the attenuations provided by the signal paths.

(57) Abstract: An apparatus and method for providing an electrically adjustable RF delay in which a splitter splits an input signal into two signal paths, one signal path providing a delay fixed at an integral number of wavelengths of a desired center frequency and both signal paths providing electrically adjustable attenuation. combiner combines the signals passing through the signal paths, such that the sum of the electrically-adjustable attenuation provided by the signal paths adds to unity, whereby the input signal is delayed by an

WO 2005/031999